

Agriculture

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

INDEX

TO VOLUME 71

January 1964 to December 1964

SUBJECT . . pages ii-viii

AUTHOR . . pages ix-x

| | Pages |
|-----------------------|---------|
| No. 1. JANUARY 1964 | 1-50 |
| No. 2. FEBRUARY 1964 | 51-100 |
| No. 3. MARCH 1964 | 101-148 |
| No. 4. APRIL 1964 | 149-202 |
| No. 5. MAY 1964 | 203-250 |
| No. 6. JUNE 1964 | 251-298 |
| No. 7. JULY 1964 | 299-348 |
| No. 8. AUGUST 1964 | 349-396 |
| No. 9. SEPTEMBER 1964 | 397-444 |
| No. 10. OCTOBER 1964 | 445-492 |
| No. 11. NOVEMBER 1964 | 493-542 |
| No. 12. DECEMBER 1964 | 543-590 |

LONDON: HER MAJESTY'S STATIONERY OFFICE

1964

VOL. 71

JANUARY 1964—DECEMBER 1964

SUBJECT INDEX

- Agricultural Chemicals Approval Scheme 135,
202, 250, 298, 348, 444, 492, 542, 590
Agricultural Shows: Why go to? 140
A.I. for Pigs 52
Alternatives to Magnesian Lime 354
Anatomy of a Beef Cattle Auction 102
And some made silage 156
Anemones in the South West 16
Animal Breeding Research Organisation Report:
Research Spot 322
Animal Health:
Brucellosis 544
Calf Pneumonia 367
Fowl Pest—Don't hesitate, Vaccinate! 1
Fowl Pest—The first year of vaccination 517
Helminthiasis and grazing management
—Part 1 80
—Part 2 106
Operations on Animals 343
Scourge of Mastitis 494
Swine Fever—the Second Stage 485
Vaccination against Johne's Disease 63
Annual Review, 1964: Short Guide to 190
Apples on the Packing Line 505
Auction: Anatomy of a Beef Cattle 102
Automatic Sow 43

Bales from Field to Farm 282
Barley Beef 375
Barley Beef on a Yorkshire Farm 290
Barley—The Maltsters' Point of View 117
Barn Dried Hay 93
Beef:
Anatomy of a Beef Cattle Auction 102
Barley Beef 375
Barley Beef on a Yorkshire Farm 290
Intensive Beef from Shorthorns 474
Beyond the Balance Sheet 128
Bit o'Cheshire (Cheese) 228
Black Fen Experimental Husbandry Farm 94
Black Scurf 436
Book Reviews (see pp. viii)
Bringing back the Acres
—Pulverized Fuel Ash 84
Brucellosis 544
Build-up of Potato Yields 457
Built of Wood 6
Bulk Grain Storage 340
Bull Pen 242

Cadlands Story: Farm Amalgamation 125
Caerphilly Cheese 278
Calf Pneumonia 367
Calf Weaning at 3-5 weeks 51
Carrot Seed and Two Fungus Diseases 555
Cattle:
Anatomy of a Beef Cattle Auction 102
Brucellosis 544
Bull Pen 242
Calf Pneumonia 367
Calf Weaning at 3-5 weeks 51
Charolais Trials in England and Wales 398
Cross-breeding in sheep and cattle: Research
Spot 322
Cubicles at Auchincruive 174
Cattle: (cont.)
Cubicles for Bullocks 244
Helminthiasis and grazing management
—Part 1 80
—Part 2 106
Housing Dairy Cows: Research Spot 378
How good is the bull? 359
Intensive Beef from Shorthorns 474
Rearing Heifer Calves on Contract 454
Scourge of Mastitis 494
Vaccination against Johne's Disease 63
Wood Chips as Litter for Cattle and Poultry
570
Celery in East Anglia 324
Cereal Drilling: Modern Trends in 44
Cereals:
Barley—The Maltsters' Point of View 117
Bulk Grain Storage 340
Compass-Conscious 246
Continuous Cereal Growing 162
Disease Risks of Continuous Cereal Growing
209
Drying Grain on the Floor 342
Drying of Feeding Wheat 329
Grain Handling made Easy 138
High-moisture Grain Storage 256
Leaf Blotch of Barley 412
Modern Trends in Cereal Drilling 44
Plastic Bag Storage of Moist Barley 584
Reduced Cultivations in Cereal Growing 438
Storing Grain on the Floor 434
Which barley next? 548
Charolais Trials in England and Wales 398
Cheaper Electricity in the Poultry House 344
Cheese:
Caerphilly 278
Cheshire 228
Stilton 470
Cherries: English 364
Choosing a Piggery 188
CO₂ for Glasshouse Crops 204
Colorado Beetle in 1963 196
Compass-Conscious 246
Concreting in Cold Weather 483
Continuous Cereal Growing 162
Co-operation in Practice 114
Cows and Acres: Pioneers of Modern British
Farming—Rex Paterson 268
Critical Approach 203
Cross-breeding in sheep and cattle: Research
Spot 322
Crystal Violet Vaccine 426
Cubicles at Auchincruive 174
Cubicles for Bullocks 244
Cutworm: Mediterranean Climbing 42

Dairying:
Housing Dairy Cows 378
How many stalls to a milking machine? 583
Machine Milking 456
Machine Stripping 361
Milking Machines at Fault 310
New Dairy Management Scheme 585
Winter Milk 55
Dangers of Over-capitalization 350

- Danish Glasshouse Industry 120
- Day at The Royal 195
- Denbighshire; North-East: Farming Cameo 38
- Derbyshire; The High Peak: Farming Cameo 88
- Derelect Farm 371
- Devon; North Tawton: Farming Cameo 136
- De-watering Poultry Manure 527
- Diseases (Livestock and Crops):
 - Black Scurf 436
 - Brucellosis 544
 - Calf Pneumonia 367
 - Carrot Seed and Two Fungus Diseases 555
 - Disease Risks of Continuous Cereal Growing 209
 - Fowl Pest—Don't hesitate, Vaccinate! 1
 - Fowl Pest—The first year of vaccination 517
 - Helminthiasis and grazing management
 - Part 1 80
 - Part 2 106
 - Leaf Blotch of Barley 412
 - Swine Fever—the Second Stage 485
 - The Scourge of Mastitis 494
 - Tipburn Mystery 167
 - Vaccination against Johne's Disease 63
- Distributor's Viewpoint: Marketing Today 2
- Dorset; East: Farming Cameo 186
- Drainage: Farmstead 22
- Drill Drill 94
- Drying Grain on the Floor 342
- Drying of Feeding Wheat 329
- Durham; South-East: Farming Cameo 240
- Early Potatoes with and without Irrigation 537
- Education:
 - International Agricultural Pilots' School 276
 - Part-time Students 71
 - Post-graduate Awards in Agricultural Research 67
- Effluent Tanks 534
- Eggs: Veal and 170
- Egg Yield: Putting up the 487
- Electricity:
 - Cheaper Electricity in the Poultry House 344
- English Cherries 364
- Essex; North-West: Farming Cameo 284
- Ewes:
 - Pregnant—Silage for 498
 - Winter Housing of 13
- Farm Amalgamation: The Cadlands Story 125
- Farm Buildings:
 - Built of Wood 6
 - Bull Pen 242
 - Choosing a Piggery 188
 - Cubicles at Auchincruive 174
 - Cubicles for Bullocks 244
 - Handling and Building Design 177
 - Mushroom Development 40
 - Novel Verandah 245
- Pig Housing
 - Part 1 460
 - Part 2 513
- Planned for Milk 90
- Stores for Ware Potatoes 313
- Thurgarton Improvement 141
- Farm Business:
 - Beyond the Balance Sheet 128
 - Dangers of Over-capitalization 350
 - Derelect Farm 371
 - Farmers of this Parish 224
 - Mixed Blessing 318
- Farm Business: (cont.)
 - Money in Sheep 213
 - Operational Research 273
 - Simplification Pays 221
 - What, more paperwork? 20
 - Winter Milk 55
- Farmers of this Parish 224
- Farming Cameo: Series 3:
 - 12. North-East Denbighshire 38
 - 13. The High Peak, Derbyshire 88
 - 14. North Tawton, Devon 136
 - 15. East Dorset 186
 - 16. South-East Durham 240
 - 17. North-West Essex 284
 - 18. West Flintshire 338
 - 19. Gower, Glamorgan 386
 - 20. South Gloucestershire 432
 - 21. Petersfield, Hants 481
 - 22. Ross-on-Wye, Herefordshire 532
 - 23. West Hertfordshire 581
- Farm Rents in 1963 181
- Farm Roads in Good Repair 371
- Farm Safety Regulations 585
- Farmstead Drainage 22
- Feeding and Feedingstuffs:
 - And some made silage 156
 - Barn Dried Hay 93
 - Feeding before Lambing 551
 - Green Gold 149
 - Hay for Sale 27
 - Less Waste with Hay 277
 - Making Hay 238
 - Mills, Mixers and Cubers 530
 - Mixed Blessing 318
 - Silage for Pregnant Ewes 498
 - Watered Concentrate 349
 - Water in Pigs' Diet 93
- Fertilizers and Fertilizing:
 - Alternatives to Magnesian Lime 354
 - CO₂ for Glasshouse Crops 204
 - Lettuce Experiment 537
 - Liquid Fertilizers 216
 - Phosphate on Heavy Land 290
 - Spinning Disc Fertilizer Broadcasters 35
- Field Crop Sprayers 132
- First Watercress Co-operative 391
- Flail Forage Harvesters 183
- Flintshire; West: Farming Cameo 338
- Flowers:
 - Anemones in the South West 16
 - CO₂ for Glasshouse Crops 204
 - Critical Approach 203
 - Flower Flow 355
- Forestry:
 - Built of Wood 6
 - Poplars and Cricket Bat Willows 260
- Fowl Pest—Don't hesitate, Vaccinate! 1
- Fowl Pest—The first year of vaccination 517
- French Beans under Mobile Glass 94
- From the ALS:
 - Bulk Grain Storage 340
 - Bull Pen 242
 - Choosing a Piggery 188
 - Concreting in Cold Weather 483
 - Effluent Tanks 534
 - Grain Handling made Easy 138
 - Mushroom Development 40
 - Onions in Store 575
 - Planned for Milk 90
 - Simple Slurry Collection 388
 - Storing Grain on the Floor 434

- From the ALS: (*cont.*)
 Taxation without Schedule A 286
- Fruit:
 Apples on the Packing Line 505
 English Cherries 364
 Fruit—Handle with Care 438
 Fruit Picking 422
 Strawberry Plants in 1965 584
 Fully Insured 409
- Glamorgan; Gower: Farming Cameo 386
- Glass and Glasshouses:
 CO₂ for Glasshouse Crops 204
 Danish Glasshouse Industry 120
 French Beans under Mobile Glass 94
 Risks in Glasshouses from TBA residues 390
- Gloucestershire; South: Farming Cameo 432
- Grafting extends the Tomato Season 195
- Grain Driers 336
- Grain Drills 430
- Grain Handling made Easy 138
- Grass and Grassland:
 Green Gold 149
 Late bite 467
 New Crop and an Old Problem: Research Spot 568
 Pinpointing Success with Grass 68
 Tall Fescue in the Sward 509
 Watered Concentrate 349
- Green Gold 149
- Group Trading 263
- Gun Law:
 —Part 1 Licences and Certificates; Shooting Rights 380
 —Part 2 Liability for Accidents 427
- Handling and Building Design 177
- Handling Sheep on Waterhouse Farm 230
- Hants; Petersfield: Farming Cameo 481
- Harvesters: Flail Forage 183
- Hay:
 Bales from Field to Farm 282
 Barn Dried Hay 93
 Hay for Sale 27
 Less Waste with Hay 277
 Making Hay 238
- Helminthiasis and grazing management
 —Part 1 80
 —Part 2 106
- He put a value on Grass: Pioneers of Modern British Farming—Arthur S. Cray 463
- Herefordshire; Ross-on-Wye: Farming Cameo 532
- Hertfordshire; West: Farming Cameo 581
- High-moisture Grain Storage 256
- Horsetails 251
- Horticulture:
 Apples on the Packing Line 505
 CO₂ for Glasshouse Crops 204
 Critical Approach 203
 Danish Glasshouse Industry 120
 English Cherries 364
 Fruit Picking 422
 Grafting extends the Tomato Season 195
 Lettuce Experiment 537
 Lettuce: The Tipburn Mystery 167
 New Grants for Horticulture 391
 New Tomato Tray 538
 Strawberry Plants in 1965 584
 Watercress around Salisbury 524
 Watercress: First Co-operative 391
- Horticultural Management:
 Anemones in the South West 16
 Flower Flow 355
 Of management and men 150
 Your Holding and its Records 446
- Housing Dairy Cows: Research Spot 378
- How good is the bull? 359
- How many stalls to a milking machine? 583
- In Brief 42, 92, 140, 194, 244, 289, 342, 390, 436, 485, 536, 583
- Indoor Lagoons for Poultry 10
- Insect Survival over the Winter 60
- Insured: Fully 409
- Intensive Beef from Shorthorns 474
- Intensive Livestock 390
- International Agricultural Pilots' School 276
- Ironstone and Agriculture 342
- Johne's Disease: Vaccination against 63
- Late bite 467
- Laxton: Medieval Farming 392
- Leaf Blotch of Barley 412
- Legal:
 Gun Law:
 —Part 1 Licences and Certificates; Shooting Rights 380
 —Part 2 Liability for Accidents 427
- Less Waste with Hay 277
- Lettuce Experiment 537
- Lettuce: The Tipburn Mystery 167
- Licences for A.I. Pigs 437
- Liquid Fertilizers 216
- Litter Recording: PIDA's 486
- Local Grown:
 Pembroke Earlies 234
 Watercress around Salisbury 524
 £ s. d. of Quality Milk 299
- Machinery:
 Drill Drill 94
 Machine Milking 456
 Machine Stripping 361
 Mechanizing Welsh Upland Farms 501
 Milking Machines at Fault 310
 Modern Trends in Cereal Drilling 44
 Tines for Pick-up Attachments 77
- Machinerywise:
 Bales from Field to Farm 282
 Field Crop Sprayers 132
 Flail Forage Harvesters 183
 Grain Driers 336
 Grain Drills 430
 Making Hay 238
 Mills, Mixers and Cubers 530
 Potato Diggers and Harvesters 384
 Spinning Disc Fertilizer Broadcasters 35
 Sugar Beet Harvesters 479
 Tractors 579
- Magnesian Lime: Alternatives to 354
- Magnesium: Soil 343
- Marketing:
 Anatomy of a Beef Cattle Auction 102
 New Producer Market at Cheltenham 289
- Marketing Today:
 Co-operation in Practice 114
 Distributor's Viewpoint 2
 Group Trading 263

Marketing Today: (cont.)

- New Perspectives 301
- Top Quality Weaners 75
- Veal and Eggs 170
- Mastitis: The Scourge of 494

Meat:

- Barley Beef 375
- Veal and Eggs 170
- Mechanizing Welsh Upland Farms 501
- Medieval Farming: Laxton 392
- Mediterranean Climbing Cutworm 42
- Message from the New Minister 493

Milk:

- How many stalls to a milking machine? 583
- £ s. d. of Quality Milk 299
- Milk and the profit margin 445
- Milking Machines at Fault 310
- Milk Quality under Report 486
- Milk under 2/- a gallon 43
- Planned for Milk 90
- Winter Milk 55

- Mills, Mixers and Cubers 530
- Ministry's Publications 34, 83, 131, 185, 288, 328, 383, 429, 478, 523, 574
- Mixed Blessing 318
- Modern Trends in Cereal Drilling 44
- Money in Sheep 213
- More Sugar from Less Bees 291
- Moulting in sheep: Research Spot 322
- Mushroom Development 40

- New Dairy Management Scheme 585
- New Glasshouse Pest (Mediterranean Climbing Cutworm) 42
- New Grants for Horticulture 391
- New Perspectives: Marketing Today 301
- New Producer Market at Cheltenham 289
- New Tomato Tray 538
- Novel Verandah 245

- Of management and men 150
- Onions in Store 575
- Operational Research 273
- Operations on Animals 343
- Organochlorine Pesticides 194

Paperwork: What more? 20

Part-time Farming:

- Part-time Farmer 265
- Part-time Students 71
- When farming is not enough 520
- Pembroke Earlies 234

Pests:

- Colorado Beetle in 1963 196
- Insect Survival over the Winter 60
- New Glasshouse Pest (Mediterranean Climbing Cutworm) 42
- Systemic Insecticides against Warble Fly 419
- Warble Fly 397
- Wild Mink 564

Phosphate on Heavy Land 290

Pietrain Pig 415

Pigs:

- A.I. for Pigs 52
- Automatic Sow 43
- Choosing a Piggery 188
- Licences for A.I. Pigs 437
- PIDA's Litter Recording 486
- Pietrain Pig 415

Pigs: (cont.)

- Pig Housing—the fundamental approach
 - Part 1 460
 - Part 2 513
- Rodbaston Large Whites 305
- Swine Fever: the Second Stage 485
- Top Quality Weaners 75
- Water in Pigs' Diet 93
- Pinpointing Success with Grass 68
- Pioneers of Modern British Farming:
 - Arthur S. Cray 463
 - Rex Paterson 268
 - Frank Rayns 557
- Planned for Milk 90
- Plastic Bag Storage of Moist Barley 584
- Poplars and Cricket Bat Willows 260
- Post-graduate Awards in Agricultural Research 67

Potatoes:

- Black Scurf 436
- Build-up of Potato Yields 457
- Early Potatoes with and without Irrigation 537
- Pembroke Earlies 234
- Potato Diggers and Harvesters 384
- Stores for Ware Potatoes 313
- Tubes and Tubers 543

Poultry:

- De-watering Poultry Manure 527
- Eggs: Veal and 170
- Fowl Pest—Don't hesitate, Vaccinate! 1
- Fowl Pest—The first year of vaccination 517
- Indoor Lagoons for Poultry 10
- Novel Verandah 245
- Putting up the Egg Yield 487
- Size of Our Poultry Flocks 405
- Transfer of the Poultry Testing Stations 516
- Turkey Packs 141
- Turkeys—Is there a breeding problem? 30
- Turkeys—The present economic trends 449
- Wood Chips as Litter for Cattle and Poultry 570

Pregnant Ewes: Silage for 498

- Pulverized Fuel Ash: Bringing back the Acres 84
- Putting up the Egg Yield 487

Quality Milk: £ s. d. of 299

Quick Frozen Peas 252

Rearing Heifer Calves on Contract 454

Reduced Cultivations in Cereal Growing 438

Research Spot:

- A New Crop and an Old Problem 568
- Cross-breeding in sheep and cattle (ABRO) 322
- Housing Dairy Cows 378
- Moulting in sheep (ABRO) 322
- Research at Rothamsted 468
- Research at Rowett 78
- Risks in Glasshouses from TBA residues 390
- Roads: Farm—in Good Repair 331
- Rodbaston Large Whites 305
- Romney Halfbred 159
- Royal: A day at The 195
- Royal looks ahead 110

Safety Regulations: Farm 585

Scourge of Mastitis 494

Sheep:

- Feeding before Lambing 551
- Handling Sheep on Waterhouse Farm 230

Sheep: (cont.)

- Helminthiasis and grazing management
 - Part 1 80
 - Part 2 106
- Money in Sheep 213
- Research Spot:
 - Cross-breeding in sheep and cattle 322
 - Moulting in sheep 322
- Romney Halfbred 159
- Sheep Handling 92
- Silage for Pregnant Ewes 498
- Swedes and Sheep 561
- Winter Housing of Ewes 13
- Wool Clip 101
- Short Guide to the Annual Review, 1964 190
- Shows:
 - Day at The Royal 195
 - For your Diary 166
 - The Royal looks ahead 110
 - Why go to Agricultural Shows? 140
- Silage:
 - And some made silage 156
 - Silage for Pregnant Ewes 498
- Simple Slurry Collection 388
- Simplification Pays 221
- Size of Our Poultry Flocks 405
- Soil Magnesium 343
- Spinning Disc Fertilizer Broadcasters 35
- Stilton—King of cheese 470
- Stores for Ware Potatoes 313
- Storing Grain on the Floor 434
- Strawberry Plants in 1965 584
- Sugar Beet:
 - More Sugar from Less Beet 291
 - Sugar Beet Harvesters 479
- Swedes and Sheep 561
- Swine Fever—the Second Stage 485
- Systemic Insecticides against Warble Fly 419
- Tall Fescue in the Sward 509
- Taxation without Schedule A 286
- Thurgarton Improvement 141
- Tines for Pick-up Attachments 77
- Tipburn Mystery 167
- Tomatoes: Grafting extends the Season 195
- Tomato Tray: New 538
- Top Quality Weaners 75
- Tractors 579
- Transfer of the Poultry Testing Stations 516
- Tubes and Tubers 543
- Turkey Packs 141
- Turkeys—Is there a breeding problem? 30
- Turkeys—The present economic trends 449
- Vaccination against Johne's Disease 63
- Veal and Eggs 170
- Vegetables:
 - Black Scurf 436
 - Build-up of Potato Yields 457
 - Carrot Seed and Two Fungus Diseases 555
 - Celery in East Anglia 324
 - Early Potatoes with and without Irrigation 537
 - French Beans under Mobile Glass 94
 - Onions in Store 575
 - Pembroke Earlyies 234
 - Potato Diggers and Harvesters 384
 - Quick Frozen Peas 252
 - Stores for Ware Potatoes 313
 - Tubes and Tubers 543
- Veterinary Products Safety Precautions Scheme 142

Wales:

- Mechanizing Welsh Upland Farms 501
- Warble Fly 397
- Watercress around Salisbury 524
- Watercress: First Co-operative 391
- Watered Concentrate 349
- Water in Pigs' Diet 93
- Weaners: Top Quality 75
- Weeds:
 - Horsetails 251
- What, more paperwork? 20
- When farming is not enough 520
- Which barley next? 548
- Why go to Agricultural Shows? 140
- Wild Mink 564
- Winter Housing of Ewes 13
- Winter Milk 55
- Wood: Built of 6
- Wood Chips as Litter for Cattle and Poultry 570
- Wool Clip 101

Your Holding and its Records 446

BOOK REVIEWS

- Adjustments and Economic Planning in Canadian Agriculture (*Dr. P. Harsanyi*) 542
- Agricultural Research Service (*Agricultural Research Council*) 147
- Agricultural Synthesis: The Farming Year (1963) (*A. N. Duckham*) 143
- Agriculture in Wales during the Napoleonic Wars, 1793–1815 (*D. Thomas*) 345
- American Farm Policy (*Don Paarlberg*) 588
- Animal Anaesthesia, Vol. 1 (*Westhues and Fritsch*) 442
- Animal Breeding (*Sir John Hammond*) 147
- Animal Health, Production and Pasture (Edited by *A. N. Worden, K. C. Sellers and P. D. E. Tribe*) 292
- Animal Machines (*Ruth Harrison*) 197
- Australian Wool Industry (*H. Munz*) 489
- Barley Production Today—1962 (*C. J. Black*) 99
- Beef Cattle. Young Farmers' Club Booklet No. 34 (*Peter Buckler*) 248
- Beekeeping Techniques (*Alexander Deans*) 199
- Better Use of the World's Fauna for Food (Edited by *J. D. Ovingdon*) 146
- Bibliography of Farm Buildings Research. Part IV—Buildings for Cattle, 1st Supplement, 1958–61 (*Agricultural Research Council*) 296
- Bibliography of Farm Buildings Research. Part VI—Buildings for the Processing and Storage of Fodder, 1st Supplement, 1958–61 (*Agricultural Research Council*) 589
- Bibliography of Farm Buildings Research. Part VII—Miscellaneous Items, 1st Supplement, 1958–1961 (*Agricultural Research Council*) 490
- Bressingham Story (*Alan Bloom*) 98
- Brother to the Ox (*Fred Kitchen*) 146
- Cassell Farm Books. Farm Crops (*Graham Boatfield*). Farm Livestock (*Graham Boatfield*). Farm Machinery (*Brian J. Bell*) 147
- Cherry Situation (*A. R. Hunt and R. R. W. Folley*) 292
- Contemporary Problems of Land Ownership (*University of Cambridge*) 587
- Cornwall: A Shell Guide (*John Betjeman*) 441

- Crop Production in a Weed-free Environment. (Symposium of the British Weed Control Council.) (Edited by *Woodford*) 95
- Daffodil and Tulip Year Book, 1964 (*Royal Horticultural Society*) 145
- Dairy Cattle Feeding and Management (*P. M. Reeves and H. O. Henderson*) 439
- Dairy Cattle Management (*James M. Wing*) 395
- Dairy Farmer's Veterinary Book (4th Edition) (*Norman Barron*) 47
- Danish Dairying (*Einar O. Petersen*) 443
- Design for Farming (*C. S. Barnard and W. C. Weston*) 346
- Economic Aspects of Farm Irrigation (*K. A. Ingersent*) 396
- Economic Planning in Peasant Agriculture (*Eric Clayton*) 96
- Electricity for the Grower (*Electrical Development Association*) 442
- Electricity in Horticulture (*A. E. Canham*) 393
- English Lake District (*Molly Lefebure*) 440
- Environmental Biology, Volume 1 (*R. F. Morgan*) 490
- Farm Crops: Books One and Two (*S. H. Bullivant*) 200
- Farm Effluents: A Guide to Landowners and their Advisers (*L. W. Gee and J. E. Maher*) 197
- Farmer and Stockbreeder Year Book and Desk Diary, 1964 (*Farmer and Stockbreeder*) 46
- Farming with Kenneth Russell (*Kenneth Russell*) 45
- Farm Machinery (7th Edition) (*C. Culpin*) 144
- Farm Organisation and Incomes in South-West England 1962-63 (*S. T. Morris, H. W. B. Luxton and G. D. D. Davies*) 491
- Farm Power. Young Farmers' Club Booklet No. 33 (*H. J. Hine*) 46
- Feeding of Fur-Bearing Animals (*F. C. Aitken*) 49
- Fertilizer Technology and Usage (Edited by *M. H. McVickar, G. L. Bridger and L. B. Nelson*) 97
- Fish and Chips (*A. G. Street*) 345
- Forestry Venture (*W. E. Hiley*) 199
- General Microbiology (*R. Y. Stanier, M. Doudoroff and E. A. Adelberg*) 200
- Genetical Principles and Plant Breeding (*Warkins Williams*) 488
- Glasshouse Production in the East Riding of Yorkshire (*A. W. Hale*) 588
- Government and Agriculture: Public Policy in a Democratic Society (*Dale Hathaway*) 247
- Grass Tetany (*André Voisin*) 198
- Growth of the Potato. Proceedings of the Tenth Easter School in Agricultural Science. University of Nottingham, 1963 (Edited by *J. D. Ivin and F. L. Milthorpe*) 297
- Hammer and Tongs. Blacksmithery down the ages (*Garry Hogg*) 293
- His Majesty's Spanish Flock. Sir Joseph Banks and the Merinos of George III of England (*H. B. Carter*) 488
- History of British Agriculture, 1846-1914 (*Christabel S. Orwin and Edith H. Whetham*) 539
- Human Ecology (*Sir George Stapledon*) 347
- Industry and the Countryside (*H. E. Bracey*) 47
- Insecticide and Fungicide Handbook (Edited by *Hubert Martin* for the British Insecticide and Fungicide Council) 146
- International Explorations of Agricultural Economics (Edited by *Roger Dixey*) 586
- Introduction to Feeding Farm Livestock (*R. H. Nelson*) 394
- Introduction to Livestock Production (Edited by *H. H. Cole*) 143
- Introduction to the Study of Insects (*Donald J. Borror and Dwight M. Delong*) 539
- Irrigation. Its Profitable Use for Agricultural and Horticultural Crops (*Sylvia Laverton*) 489
- Kent Wild White Clover (*R. J. Hagger and W. Holmes*) 442
- Landscape and Soil (*A. Voysey*) 295
- Land Use in Northern Ireland (Edited by *Leslie Symons*) 294
- Lily Year Book, 1964 (*Royal Horticultural Society*) 201
- Living on Exmoor (*Hope L. Bourne*) 96
- Man Must Eat (*Sir William Slater*) 395
- Metals for Engineering Craftsmen (*Rural Industries Bureau*) 541
- Onions and their Allies (*Henry A. Jones and Louis K. Mann*) 393
- Pattern of Farming in the Eastern Counties (*B. G. Jackson, C. S. Barnard and F. G. Sturrock*) 144
- Perry Pears (*University of Bristol*) 95
- Physiology and Biochemistry of Herbicides (Edited by *L. J. Audus*) 247
- Pig Farmer's Veterinary Book (*Norman Barron*) 440
- Portrait of Devon (*D. St. Leger Gordon*) 45
- Portrait of the Lakes (*Norman Nicholson*) 249
- Potassium in Relation to Grassland Production (*International Potash Institute, Berne*) 394
- Poultry Keeping Simplified (*Jim Worthington*) 540
- Principles of Agricultural Entomology (*C. A. Edwards and G. W. Heath*) 586
- Principles of Angiosperm Taxonomy (*Davis and Heywood*) 587
- Proceedings of the Second International Agricultural Aviation Congress (*International Agricultural Aviation Centre*) 99
- Progress in Nutrition and Allied Sciences (Edited by *D. P. Cuthbertson*) 198
- Recent Plant Breeding Research, Svalöf, 1946-1961 (Edited by *E. Akerberg and A. Hagberg*) 48
- Records for Profitable Farming (*G. H. Camamile and T. W. D. Theophilus*) 441
- Red Dragon Farm (*A. M. Morrison*) 296
- Report of the Research Committee on Toxic Chemicals (*Agricultural Research Council*) 248
- Research, Science and Technology (*Marlborough College, Wilts*) 249
- Rhododendron and Camellia Year Book, 1964 (*Royal Horticultural Society*) 296
- Shell and BP Guide to Britain (Edited by *Geoffrey Bounphrey*) 293
- Shepherd's Guide (*Farmers' Weekly*) 96
- Shooting Pigeons (*C. L. Coles*) 201
- Soil Fungi and Soil Fertility (*S. D. Garrett*) 49
- Soils and Land Use of the District around Bangor and Beaumaris (*D. F. Ball*) 50
- Stud Farm (*Vincent Orchard*) 346
- Suffolk Prospect (*Justin and Edith Brooke*) 293
- Survey of the Agriculture of Cheshire (*W. B. Mercer*) 295
- Tenure of Farm Land (*National Farmers' Union*) 541
- Trade in Single-Suckled Calves (*E. M. Carpenter and K. Dent*) 100
- Turkey Farming (2nd Edition) (*Ray Feltwell*) 48

- Vegetation of Scotland (Edited by *J. H. Burnett*)
540
- Veterinary Protozoology (3rd Edition)
(*Richardson and Kendall*) 145
- Virus Diseases of Apples and Pears (*Common-
wealth Agricultural Bureaux*) 439
- Water Relations of Plants (*Rutter and Whitehead*)
294
- Wayside and Woodland Trees: A Guide to the
Trees of Britain and Ireland (*Herbert L. Edlin*)
248
- Weather and Man (*H.M.S.O.*) 347
- While Some Trees Stand (*Garth Christian*) 97
- Wild Favours (*Eileen Soper*) 98
- Worcestershire: A Shell Guide (*J. Lees-Milne*)
589
- Young Man's Guide to Farming (*P. S. Hough*)
346

VOL. 71

JANUARY 1964—DECEMBER 1964

AUTHOR INDEX

- Aaron, J. R.: Wood Chips as Litter for Cattle and Poultry 570
 Abbott, A. Charlton: Hay for Sale 27
 Adamson, A.: Rearing Heifer Calves on Contract 454
 Allen, P. G. and D. J. Fuller: The Danish Glasshouse Industry 120
 Aronson, G. F.: Gun Law
 —Licences and Certificates 380
 —Shooting Rights 380
 —Liability for Accidents 427
 Arthey, V. D.: Quick Frozen Peas 252
 Baker, H. K. and J. R. A. Chard: Tall Fescue in the Sward 509
 Beard, G. H. and A. Lester-Card: Intensive Beef from Shorthorns 474
 Beer, A. E. and Miss D. M. Cooper: Turkeys—Is there a breeding problem? 30
 Beesley, W. N.: Systemic Insecticides against Warble Fly 419
 Blunt, C. F.: Farming Cameo: Gower, Glamorgan, 386
 Boatfield, Graham: Part-time Students 71
 Bolam, Philip: Pioneers of Modern British Farming—Frank Rayns 557
 Bond, K. Ian: Feeding before Lambing 551
 Bourne, M. J.: Farming Cameo: East Dorset 186
 Boyd, D. A. and Walter R. Smith: Charolais Trials in England and Wales 398
 Bradshaw, A. J. and M. N. S. Henderson: Mills, Mixers and Cubers 530
 Calder, Alec: Simplification Pays 221
 Caldwell, T. H.: Liquid Fertilizers 216
 Carter, T. C.: Operational Research 273
 Carter, W. R. B.: Farming Cameo: The High Peak, Derbyshire 88
 Chard, J. R. A. and H. K. Baker: Tall Fescue in the Sward 509
 Chater, G. P.: How good is the bull? 359
 Clifton, Eric: Winter Housing of Ewes 13
 Clough, Peter: Machine Stripping 361
 Coldwell, B. D.: Planned for Milk 90
 Cole, Helen: Anemones in the South West 16
 Coles, Dr. R.: The Size of Our Poultry Flocks 405
 Cook, L. R. S.: Grafting extends the Tomato Season 195
 Cooper, Miss D. M. and A. E. Beer: Turkeys—Is there a breeding problem? 30
 Cramp, K. V.: Celery in East Anglia 324
 Croxall, H. E.: The Disease Risks of Continuous Cereal Growing 209
 Culpin, Claude: High-moisture Grain Storage 256
 Dadd, Christopher: The Royal looks ahead 110
 Dalton, T. W.: Making Hay 238
 Davey, Brian: What, more paperwork? 20
 David, W. M.: Barley—The Maltsters' Point of View 117
 Davies, W. Morley: Bringing back the Acres—Pulverized Fuel Ash 84
 Dawson, Ruth: Stilton—King of cheese 470
 Denyer, O. J.: Farming Cameo: North-East Denbighshire 38
 Devine, E. S.:
 Fruit Picking 422
 Apples on the Packing Line 505
 Dewes, T. D. and G. E. Tooby: Flail Forage Harvesters 183
 Doling, D. A.: Leaf Blotch of Barley 412
 Downey, David S.: Top Quality Weaners 75
 Doyle, T. M.: Vaccination against Johne's Disease 63
 Eastwood, A. A. and G. A. Mansfield: Veal and Eggs 170
 Edmunds, Henry: Anatomy of a Beef Cattle Auction 102
 Falkingham, R. V. and W. S. Shattock: Bales from Field to Farm 282
 Ferraro, D. A.: Farming Cameo: South Gloucestershire 432
 Fiddian, W. E. H. and F. R. Horne: Which barley next? 548
 Finn, Hugh: The Romney Halfbred 159
 Folley, Roger: English Cherries 364
 Forrest, Geoffrey: Built of Wood 6
 Fuller, D. J. and P. G. Allen: The Danish Glasshouse Industry 120
 Gammon, F. L. and C. M. Poole: Sugar Beet Harvesters 479
 Gane, A.: Farming Cameo: West Hertfordshire 581
 Gardner, Ron: CO₂ for Glasshouse Crops 204
 Glanville, M. F.: Grain Handling made Easy 138
 Hamilton, John H.: Farming Cameo: Petersfield, Hants 481
 Hammond, Sir John: A.I. for Pigs 52
 Handoll, G. P.: Farming Cameo: West Flintshire 338
 Harland, H.: Taxation without Schedule A 286
 Harris, W. A. R.: Pig Housing—the fundamental approach
 —Part 1 460
 —Part 2 513
 Harrison, J. P.: Onions in Store 575
 Harvey, Nigel:
 Cubicles for Bullocks 244
 The Part-time Farmer 265
 Henderson, M. N. S. and A. J. Bradshaw: Mills, Mixers and Cubers 530
 Hepherd, R. Q. and D. E. Willows: Spinning Disc Fertilizer Broadcasters 35
 Hewett, P. D.: Carrot Seed and Two Fungus Diseases 555
 Hine, H. Jordan and M. Jamieson: Potato Diggers and Harvesters 384
 Holder, F. W.:
 The Bull Pen 242
 Concreting in Cold Weather 483
 Hope, R.: Pinpointing Success with Grass 68
 Horne, F. R. and W. E. H. Fiddian: Which barley next? 548
 Howse, R. E.: Handling Sheep on Waterhouse Farm 230
 Hughes, R. G. and B. Wilkinson: Modern Trends in Cereal Drilling 44
 Hume, W. G.: The Tipburn Mystery 167

- Hutchison, J.: Milking Machines at Fault 310
- Ivins, Professor J. D.: The Build-up of Potato Yields 457
- Jamieson, M. and H. Jordan Hine: Potato Diggers and Harvesters 384
- Jones, D. J. Columbus: Pioneers of Modern British Farming—Arthur S. Cray 463
- Jones, J. T.: A Novel Verandah 245
- Jones, T. W. W.: Farming Cameo: North Tawton, Devon 136
- Jones, W. Dyfri: Turkeys—The present economic trends 449
- Kinch, David: Calf Pneumonia 367
- Kindell, J. M.: Derelict Farm 371
- Kirk, J. H.: New Perspectives 301
- Laverton, Sylvia:
Research Spot
—Items from 1964 report of Animal Breeding Research Organisation 322
—Items from 1963 report of Rothamsted Experimental Station 468
- Lester-Card, A. and G. H. Beard: Intensive Beef from Shorthorns 474
- Lockie, G. D.: Of management and men 150
- Maddever, Kathleen: Caerphilly Cheese 278
- Magson, W.: Storing Grain on the Floor 434
- Mansfield, G. A. and A. A. Eastwood: Veal and Eggs 170
- Matthews, J. C.: The Rodbaston Large Whites 305
- McClelland, W. G. and R. Nicholson: The Distributor's Viewpoint 2
- Mellard, D.: Flower Flow 355
- Michel, J. F.:
Helminthiasis and grazing management
—Part 1 80
—Part 2 106
- Milner, C. K. and J. Woodforde: The Drying of Feeding Wheat 329
- Mordue, Miss J. E.: Black Scurf 436
- Morgan, E. M. and G. F. Shattock: Tractors 579
- Morgan, W. J. Brinley: Brucellosis 544
- Mount, Sir William: Poplars and Cricket Bat Willows 260
- Nicholson, R. and W. G. McClelland: The Distributor's Viewpoint 2
- Nix, J. S.: The Dangers of Over-capitalization 350
- Owen, T. A.: Watercress around Salisbury 524
- Owen, W. G.: Swedes and Sheep 561
- Pearce, D.: Farming Cameo: South-East Durham 240
- Phillips, Mary: A bit o' Cheshire 228
- Poole, C. M. and F. L. Gammon: Sugar Beet Harvesters 479
- Popplestone, H. G.: When farming is not enough 520
- Prytherch, E. I.: The Pembroke Earlyies 234
- Richards, H. and H. R. Smith: Grain Drills 430
- Richards, Stanley: And some made silage 156
- Richardson, P. and G. P. Shipway: Field Crop Sprayers 132
- Riley, Charles: De-watering Poultry Manure 527
- Rolfe, S. W. H.: Insect Survival over the Winter 60
- Salkield, A. M.: Farming Cameo: Ross-on-Wye, Herefordshire 532
- Sawyer, Henry A.: Farm Roads in Good Repair 331
- Sayce, R. B.: Simple Slurry Collection 388
- Senior, W. S.: Putting up the Egg Yield 487
- Shattock, G. F. and E. M. Morgan: Tractors 579
- Shattock, W. S. and R. V. Falkingham: Bales from Field to Farm 282
- Shipway, G. P. and P. Richardson: Field Crop Sprayers 132
- Silvey, D. R. and F. G. Sturrock: Winter Milk 55
- Simpson, J. W.: Fowl Pest—The first year of vaccination 517
- Smith, H. R. and H. Richards: Grain Drills 430
- Smith, Walter R.: Silage for Pregnant Ewes 498
- Smith, Walter R. and D. A. Boyd: Charolais Trials in England and Wales 398
- Soden, R. W.: Farmstead Drainage 22
- Stevens, G. J. F.: Money in Sheep 213
- Stone, P. J.: A Mixed Blessing 318
- Sturrock, F. G. and D. R. Silvey: Winter Milk 55
- Tasker, Jack: Beyond the Balance Sheet 128
- Telford, T. M.: Early Potatoes with and without Irrigation 537
- Tetlaw, Clive: Indoor Lagoons for Poultry 10
- Thomas, J. Rhys: Group Trading 263
- Thompson, Harry V.: Wild Mink 564
- Tilley, Michael F.:
Choosing a Piggery 188
Stores for Ware Potatoes 313
- Tooby, G. E. and T. D. Dewes: Flail Forage Harvesters 183
- Troon, John: Handling and Building Design 177
- Tweedle, Tom: Barley Beef 375
- Vinter, J. and R. L. Wilkinson: Grain Driers 336
- Wade, J. C.: Co-operation in Practice 114
- Warboys, Ivan: Mechanizing Welsh Upland Farms 501
- Weston, W. C.: Farming Cameo: North-West Essex 284
- White, J.: The Pietrain Pig 415
- Whitlock, Ralph:
Farm Amalgamation—The Cadlands Story 125
Farmers of this Parish 224
- Wilkinson, B.: Continuous Cereal Growing 162
- Wilkinson, B. and R. G. Hughes: Modern Trends in Cereal Drilling 44
- Wilkinson, R. L. and J. Vinter: Grain Driers 336
- Williamson, T. Wannop: Pioneers of Modern British Farming—Rex Paterson 268
- Willows, D. E. and R. Q. Hephherd: Spinning Disc Fertilizer Broadcasters 35
- Wilmot, R. T. D.: Fully Insured 409
- Wilson, C. D.: The Scourge of Mastitis 494
- Wood, N. B.:
Bulk Grain Storage 340
Effluent Tanks 534
- Woodforde, J. and C. K. Milner: The Drying of Feeding Wheat 329
- Wright, W. J.: Your Holding and its Records 446
- Young, George: Mushroom Development 40

